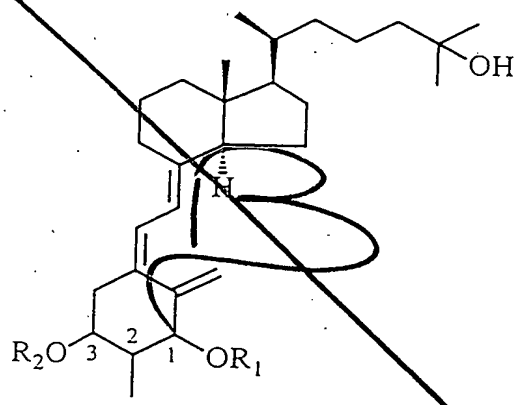
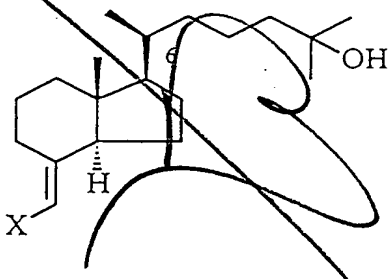
CLAIMS

1. 1, 25-dihydroxy-2-methylvitamin D3 derivatives expressed by the following ~~general~~ formula (I),



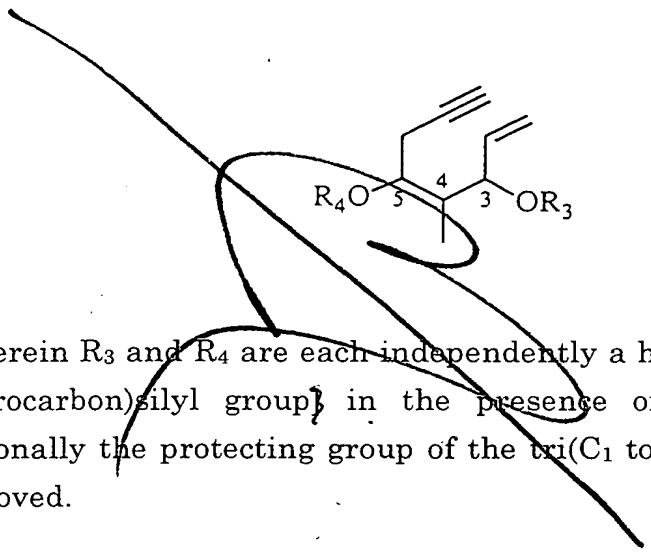
{wherein each of R_1 and R_2 is independently a ~~hydrogen atom or a~~ tri(C_1 to C_7 alkyl)silyl group} ~~herein~~ and wherein configurations of asymmetric carbons at the 1-, 2- and 3-positions are each independently α-configuration or β-configuration}.

2. A method for producing a vitamin D_3 derivative described in the claim 1, wherein an exo-methylene compound expressed by the following ~~general~~ formula (II),



, and

{wherein X is a bromine atom or an iodine atom}, is made to react with an ene-yne compound expressed by the following general formula (III),



{wherein R_3 and R_4 are each independently a hydrogen atom or a tri(C_1 to C_7 hydrocarbon)silyl group} in the presence of a palladium catalyst, and optionally the protecting group of the tri(C_1 to C_7 hydrocarbon)silyl group is removed.